Basic information	
2024/0016(CNS)	Procedure completed
CNS - Consultation procedure Regulation	
EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence	
Amending Regulation 2021/1173 2020/0260(NLE)	
Subject	
3.30.06 Information and communication technologies, digital technologies 3.40.06 Electronics, electrotechnical industries, ICT, robotics 8.40.08 Agencies and bodies of the EU	

Key players				
European Parliament	Committee responsible	Rapporteur		Appointed
	ITRE Industry, Research and Energy	CARVALHO Ma Graça (EPP)	aria da 1	4/02/2024
		Shadow rappor	teur	
		HRISTOV Ivo (S&D)	
		SOLÍS PÉREZ (Renew)	Susana	
		NIINISTÖ Ville /EFA)	(Greens	
		ROOS Robert (ECR)	
Council of the European Union				
European Commission	Commission DG		Commissioner	
	Communications Networks, Content and Technology	Communications Networks, Content and Technology		rry

Key events			
Date	Event	Reference	Summary
24/01/2024	Legislative proposal published	COM(2024)0029	Summary
11/03/2024	Committee referral announced in Parliament		
20/03/2024	Vote in committee		
25/03/2024	Committee report tabled for plenary, 1st reading/single reading	A9-0161/2024	

24/04/2024	Decision by Parliament	T9-0359/2024	Summary
24/04/2024	Results of vote in Parliament		
19/06/2024	Final act published in Official Journal		
17/07/2024	Act adopted by Council after consultation of Parliament		

Technical information			
Procedure reference	2024/0016(CNS)		
Procedure type	CNS - Consultation procedure		
Procedure subtype	Legislation		
Legislative instrument	Regulation		
Amendments and repeals	Amending Regulation 2021/1173 2020/0260(NLE)		
Legal basis	Treaty on the Functioning of the EU TFEU 188 -a1 Treaty on the Functioning of the EU TFEU 187		
Other legal basis	Rules of Procedure EP 165		
Stage reached in procedure	Procedure completed		
Committee dossier	ITRE/9/14076		

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Amendments tabled in committee		PE759.647	29/02/2024	
Committee report tabled for plenary, 1st reading/single reading		A9-0161/2024	25/03/2024	
Text adopted by Parliament, 1st reading/single reading		T9-0359/2024	24/04/2024	Summary

European Commission

Document type	Reference	Date	Summary
Legislative proposal	COM(2024)0029	24/01/2024	Summary
Commission response to text adopted in plenary	SP(2024)394	08/08/2024	

Other institutions and bodies

Institution/body	Document type	Reference	Date	Summary
EESC	Economic and Social Committee: opinion, report	CES0926/2024	20/03/2024	
CofR	Committee of the Regions: opinion	CDR1164/2024	09/10/2024	

Regulation 2024/1732 OJ OJ L 19.06.2024

Summarv

EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence

2024/0016(CNS) - 24/01/2024 - Legislative proposal

PURPOSE: to amend Regulation (EU) 2021/1173 as regards a European High Performance Computing (EuroHPC) initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence.

PROPOSED ACT: Council Regulation.

ROLE OF THE EUROPEAN PARLIAMENT: the Council adopts the act after consulting the European Parliament but without being obliged to follow its opinion.

BACKGROUND: a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) aims to improve the functioning of the internal market by laying down a uniform legal framework in particular for the development, marketing and use of artificial intelligence in conformity with Union values.

Since 2021, when Council Regulation (EU) 2021/1173 was adopted, the field of artificial intelligence (AI) has seen enormous technical progress and become a highly strategic and contested domain globally. The Union is at the forefront of efforts to support responsible innovation in trustworthy AI, while setting guardrails and developing effective governance.

On 13 September 2023, as part of a comprehensive approach to support responsible innovation in AI, the Commission announced a new strategic initiative to make the Union's high-performance computing capacity available to innovative European startups in trustworthy AI to train their models.

Given that the Union's most powerful world-class supercomputing capacity is found in the European High Performance Computing Joint Undertaking's facilities, it is those facilities that should be made available in order for the Commission's initiative to become a reality. It is accordingly necessary to introduce a further objective to the existing six objectives of the Joint Undertaking that would cover the contribution made by its supercomputers to the new Al initiative of the Union.

CONTENT: the proposed amendment will enable the Joint Undertaking to perform activities in the domains of acquiring and operating Al-dedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large Al foundation models. Those changes would enable the Joint Undertaking to offer tailored computing power and services to nurture large-scale Al training and development and uptake in the Union, which is **not feasible under the current Regulation**. Only common action of this kind at Union level can enhance the technological sovereignty and Union's economic security and leverage its tools and regulatory powers to shape global rules and standards in Al, at the same time significantly contributing to Al uptake in European industry, research and public services.

More specifically, the proposed amendment of the EuroHPC Regulation aims to **set up Al Factories**, a new pillar for the EU's supercomputers Joint Undertaking activities. It will consist of:

- acquiring, upgrading and operating Al-dedicated supercomputers to enable fast machine learning and training of large General Purpose Al (GPAI) models;
- facilitating access to the AI dedicated supercomputers, contributing to the widening of the use of AI to a large number of public and private users, including startups and SMEs;
- offering a **one-stop shop** for startups and innovators, supporting the AI startup and research ecosystem in algorithmic development, testing evaluation and validation of large-scale AI models, providing supercomputer-friendly programming facilities and other AI enabling services;
- providing dedicated AI oriented supercomputing services in support of the AI startup, science and innovation ecosystem for the large-scale training and development of general purpose, trustworthy and ethical AI models and systems, and of AI user communities for the development, validation and running of emerging AI applications, in particular in the areas of health and care, climate change, robotics, and connected and automated driving;
- fostering a talent development pool to provide advanced education, training, skilling and reskilling activities to relevant AI stakeholders.

EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence

PURPOSE: to amend Regulation (EU) 2021/1173 as regards a European High Performance Computing (EuroHPC) initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence.

LEGISLATIVE ACT: Council Regulation (EU) 2024/1732 amending Regulation (EU) 2021/1173 as regards a EuroHPC initiative for start-ups in order to boost European leadership in trustworthy artificial intelligence.

BACKGROUND: Regulation of the European Parliament and of the Council on harmonised rules on artificial intelligence (the 'Al Act') aims to improve the functioning of the internal market by laying down a uniform legal framework in particular for the development, marketing and use of artificial intelligence ('Al') in conformity with Union values.

Since 2021, when Council Regulation (EU) 2021/1173 was adopted, the field of AI has seen enormous technical progress and become a highly strategic and contested domain globally. The Union is at the forefront of efforts to support responsible research and innovation in trustworthy and ethical AI, while setting guardrails and developing effective governance.

On 13 September 2023, as part of a comprehensive approach to support responsible research and innovation in AI, the Commission announced a new strategic initiative to make the Union's high-performance computing capacity available to innovative European startups in trustworthy AI in order to train their models. That initiative complements work on setting guardrails for AI through the AI Act, establishing governance structures and supporting innovation through the Coordinated Plan on Artificial Intelligence.

Given that the Union's most powerful world-class supercomputing capacity is located in the European High Performance Computing Joint Undertaking's facilities, it is those facilities that should be made available in order for the Union's initiative to become a reality. It is accordingly necessary to add a seventh objective to the existing six objectives of the Joint Undertaking, concerning the contribution made by its supercomputers to the new Al initiative of the Union

CONTENT: the amendment to Council Regulation (EU) 2021/1173 will enable the Joint Undertaking to perform activities in the domains of acquiring and operating Al-dedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large Al foundation models. The changes would enable the Joint Undertaking to offer tailored computing power and services to nurture large-scale Al training and development and uptake in the Union, which is not feasible under the current regulation.

Acquisition and ownership of Al-optimised supercomputers

The Joint Undertaking will acquire Al-optimised supercomputers and shall own them.

Financial contribution

Hosting entities can receive a Union financial contribution that covers up to 50% of the acquisition costs of Al-super-computers and up to 50% of their operating costs (including Al-oriented super-computing service costs). The ownership of the Al-optimised supercomputers can be transferred to the hosting entities five years after the machine has passed an acceptance test.

Use of EuroHPC supercomputers

The regulation states that the Al-optimised supercomputers and EuroHPC supercomputers upgraded for Al capabilities will be used primarily for the development, testing, evaluation and validation of large scale, general purpose Al training models and emerging Al applications, as well as for the further development of Al solutions in the Union requiring High Performance Computing and the execution of large-scale Al algorithms for the resolution of science problems.

One-stop shop

For the Al-optimised supercomputers, the hosting entity will create a one-stop shop for users, including startups, small and medium-sized enterprises and scientific users, to facilitate access to its support services. The EuroHPC Governing Board will define special access conditions for the Al-supercomputers, taking into account the specific needs of the Al startup ecosystem and the research and innovation ecosystem.

ENTRY INTO FORCE: 9.7.2024.

EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence

2024/0016(CNS) - 24/04/2024 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 525 votes to 32, with 21 abstentions, a legislative resolution on the proposal for a Council regulation amending Regulation (EU) 2021/1173 as regards an EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence.

The proposed amendment will enable the High-Performance Computing Joint Undertaking (EuroHPC) to make its HPC capacity available to innovative European start-ups, in order to foster the development, testing and validation of Al solutions and to enable the formation and large-scale development of general-purpose, reliable and ethical Al models and systems, thereby strengthening Europe's competitiveness and industrial base in the field of Al.

Parliament approved the Commission proposal subject to the following amendments:

Artificial Intelligence Factory pillar for trustworthy and ethical Artificial Intelligence

This pillar covers activities for the provision of an Artificial Intelligence-oriented supercomputing service infrastructure that is aiming at further developing the innovation capabilities and skills of the Artificial Intelligence ecosystem; those activities should address, *inter alia*:

- the acquisition and operation of Artificial Intelligence-dedicated supercomputers co-located with data centres or connected to data centres via very high speed networks;
- the upgrade of existing EuroHPC supercomputers with Artificial Intelligence capabilities;
- providing access to the Artificial Intelligence-dedicated supercomputers or EuroHPC supercomputers upgraded with Artificial Intelligence capabilities, including widening their use to a large number of public and private users, including start-ups, scale-ups, SMEs, higher education institutions and the wider scientific community:
- broadly communicating the opportunities offered by the Artificial Intelligence Factories to start-ups, scale-ups and research and innovation communities;
- through a transparent, equal opportunities and open process, attracting, pooling, training and retaining talent, including students, developers, researchers, scientists and the user community;
- interacting with the other Artificial Intelligence Factories, making their services accessible across Europe, paying constant attention to geographical and gender balance, and cooperating with the EuroHPC Competence Centres and Centres of Excellence, and with relevant Artificial Intelligence initiatives of the Union;
- maintaining and optimising supercomputers with artificial intelligence capabilities, ensuring their reliability and performance for advanced computational tasks.

Hosting entities

For the Artificial Intelligence-dedicated supercomputers, the following additional selection criteria should apply for the hosting entities:

- the proximity or connection via very high speed networks with a planned or an established data centre;
- vision and plans of the hosting entity regarding the **Artificial Intelligence-dedicated supercomputer's energy efficiency and environmental sustainability**, making use of a lifecycle approach, the availability of adequate access to clean affordable energy, also through power purchase agreements which may be based on renewable energy, and the use of electricity that is locally generated;
- vision, plans and capability of the hosting entity to address the challenges of the Artificial Intelligence start-up and research and innovation ecosystem and the Artificial Intelligence user community, enhancing such an ecosystem by promoting synergies and innovation, including investments in future technologies, contributing and providing a supportive centralised or distributed Artificial Intelligence-oriented supercomputing service;
- existing capabilities and future plans of the hosting entity to contribute to the development, **attraction, training and retention of the talent pool** and the creation of skills, capabilities and competences to use the supercomputers, including in the form of support for start-ups through incubator or accelerator programmes.

Use of EuroHPC supercomputers

The Governing Board should define specific access conditions for different types of users or applications, including dedicated access to start-ups, scale-ups and SMEs. Only proposals for developing **trustworthy and ethical Artificial Intelligence models, systems and applications that are in line with Union rules and values**, should be eligible for access. The access criteria, methodologies and guidance on access prioritisation will be defined in accordance with the Ethics By Design approach for Artificial Intelligence and with the support of the Ethics Appraisal Mechanism of Horizon Europe.

One-stop shop

The amended text stressed that a one-stop shop should be established by the Joint Undertaking on the basis of the principles of open access, in a way that different types of users can fully leverage the potential of AI in supercomputing. The opportunities provided by AI Factories should be widely communicated to start-ups, small and medium enterprises (SMEs), the innovation ecosystem and researchers engaged in Union programmes, highlighting the numerous benefits that AI can offer in supercomputing applications.